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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,015	12/21/2004	Pascal Leclerc	034299-613	7248

7590 10/14/2005

Robert E Krebs
Thelen Krebs & Priest
P O Box 640640
San Jose, CA 95164-0640

EXAMINER

SONG, SARAH U

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/519,015	LECLERC ET AL.	
	Examiner	Art Unit	
	Sarah Song	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-17 is/are rejected.
- 7) ☒ Claim(s) 10 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0305</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The prior art documents submitted by the applicant in the Information Disclosure Statement filed on March 25, 2005 have all been considered and made of record (note the attached copy of form PTO-1449).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 2, 5, 6, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogawa et al. (JP 57-108816).**

5. Regarding claims 1, 2, 5, 6, 13 and 14, Ogawa et al. discloses a device for automatically centering a laser beam in a light guide 3, such as a monomode or multimode optical fiber, this device being characterized in that it comprises a volume scatterer 21 comprising an entry face for the laser beam and designed to scatter this laser beam and automatically center it in the optical fiber. The volume scatterer is cylindrical and comprises a light reflector (cladding glass layer 32) surrounding a side face.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 3, 7-9, 11 and 15-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al.**

8. Regarding claims 3 and 11, Ogawa et al. discloses the claimed invention but does not expressly disclose the thickness of the volume scatterer is equal to at least 100 times the wavelength. However, from Figure 2, it appears that the thickness of the volume scatterer is equal to at least 100 times the wavelength. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the appropriate thickness of the volume scatterer since it has been held that where the general conditions of a claim are disclosed by the prior art, discovering optimum or workable values involves only routine skill in the art.

9. Regarding claims 7-9 and 15-17, Ogawa et al. does not expressly disclose a defocusing lens on an entry face, a reflector protruding beyond an entry face, or an auxiliary fiber placed on the entry face of the volume scatterer. However, defocusing lenses (e.g. collimators) are well known in the art for improving optical coupling characteristics. Additionally, GRIN fiber collimators are known in the art as auxiliary fibers for improving input coupling. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a defocusing lens or an auxiliary fiber such as a GRIN fiber lens on the entry

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face to optimize optical coupling characteristics. Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the reflector protruding beyond an entry face for the purpose of protecting the entry face from damage.

10. **Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. as applied to claim 1 or 2 as applicable above, and further in view of Müller et al. (U.S. Patent 5,401,270 cited by Applicant).**

11. Regarding claims 4 and 12, Ogawa et al. discloses the claimed invention but does not expressly disclose a polytetrafluoroethylene volume scatterer.

12. Müller et al. discloses a polytetrafluoroethylene volume scatterer.

13. Ogawa et al. and Müller et al. are analogous art as pertaining to volume scatterers.

14. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a polytetrafluoroethylene volume scatterer in the device of Ogawa et al.

15. One of ordinary skill in the art would have been motivated to make the modification in order to provide cost reduction of the device.

Allowable Subject Matter

16. Claims 10 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose or suggest, either alone or in combination, the method of manufacturing the device in which a tubular light guide is used as a cutting punch.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Furuta, Horie et al, Ishii et al. and Huber et al. disclose various volume scatterers.

19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Song whose telephone number is 571-272-2359. The examiner can normally be reached on M-Th 7:30am - 6:00pm.

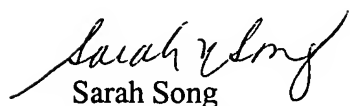
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Sarah Song", written in a cursive style.

Sarah Song
Patent Examiner
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